Claims

1. A racket for ball games including a frame (4) having a racket head (6) and a handle portion (10) connected thereto and being formed of a frame profile, wherein the racket head (6) defines a stringing plane and the frame profile comprises at least one opening (12) extending through the frame profile and essentially perpendicular with respect to the stringing plane of the racket (2).

2. The racket according to claim 1, wherein the frame (4) comprises a plurality of through holes lying essentially in the stringing plane for passing through them the individual strings of the stringing.

3. The racket according to claim 1 or 2, wherein at least two openings (12) are provided essentially symmetrical with respect to the longitudinal axis of the racket (2).

4. The racket according to any one of claims 1 to 3, wherein the at least one opening (12) is provided in the area between two o'clock and four o'clock and/or between eight o'clock and ten o'clock on the racket head (6).

5. The racket according to any one of claims 1 to 4, wherein the at least one opening (12) is provided at about three o'clock and/or about nine o'clock on the racket head (6).

6. The racket according to any one of claims 1 to 5, wherein the at least one opening (12) is formed as a through hole.

7. The racket according to claim 6, wherein the through hole is cylindrical, preferably circular cylindrical, elliptical or rectangular cylindrical.

8. The racket according to claim 7, wherein the diameter (D) of the through hole ranges between 2 mm and 8 mm, preferably between 3 mm and 6 mm.

9. The racket according to any one of claims 1 to 5, wherein the at least one opening (12) is formed by two opposite holes (12a) in the frame profile.

10. The racket according to claim 9, wherein each of the holes (12a) is essentially trough-shaped when being viewed in the direction of the stringing plane.

11. The racket according to claim 9 or 10, wherein the length (L) of each of the holes (12a) along the frame profile ranges between 1 mm and 10 mm, preferably between 3 mm and 7 mm.

12. The racket according to any one of claims 9 to 11, wherein each of the holes (12a) has a depth (T) corresponding to at least the wall thickness of the frame profile and extending maximally up to a groove (20) for receiving a head band.

13. The racket according to any one of claims 1 to 12, wherein the at least one opening (12) comprises an essentially tubular insert (14) in order to close the frame profile towards the interior.

14. The racket according to any one of claims 1 to 13, wherein the frame profile comprises one or more strengthening layer(s) in the area around the at least one opening (12).

15. The racket according to claim 14, wherein the strengthening layer comprises woven materials made of carbon fiber, glass or aramid and/or a unidirectional prepreg, and is arranged at an angle of ± 45° with respect to the direction of the frame.

16. The racket according to any one of claims 1 to 15, wherein in the area of the opening (12) at least one trough-shaped depression (18) is formed in the frame profile.

17. The racket according to claim 16, wherein two opposite trough-shaped depressions (18) are formed at each opening (12).

18. A process for producing a racket, in particular according to claims 1 to 17, comprising the following steps:

(a) forming a frame (4) consisting of a frame profile and comprising a racket head (6) and a handle portion (10) connected thereto; and

(b) providing at least one opening (12) extending through the frame profile essentially perpendicular with respect to a stringing plane formed by the racket head (6).

19. The process according to claim 18, wherein at least two openings (12) are provided essentially symmetrical with respect to the longitudinal axis of the racket (2).

20. The process according to claim 18 or 19, wherein the at least one opening (12) is drilled, milled or sawed into the frame profile.

21. The process according to any one of claims 18 to 20, wherein an essentially tubular insert (14) is introduced in the at least one opening (12) in order to close the frame profile towards the interior.

22. The process according to any one of claims 18 to 21, wherein one or more strengthening layer(s) is/are provided in the area around the at least one opening when the frame profile is formed.